

PORTABLE BOOK-CASE.

I have not yet had an opportunity of seeing or reading a description of the "American portable book-case," but I beg leave to show a book-case which, for portability, will, I think, commend itself to those requiring such a thing. In the annexed sketch, fig. 1, is a front view of the book-case; fig. 2, the end, or gable. Fig. 1 is shown extended ready for the books, and fig. 3 shows the book-case folded up ready for removal, all the parts being contained inside in the order to be described. Fig. 4 is a section of fig. 3 at A. B, and shows the various pieces composing the article closely packed together—the whole being in fact next to a solid. Referring to fig. 1, it will be seen that the article consists of two gables with haffits in front, a top, a bottom, two shelves, a back, and a baluster railing over the front.

The following is a short description of its construction:—The two gables are 4 ft. long over all and 12 in. broad; They may be a plain board or panelled as in fig. 2; they have a haffit on the front of each, $3\frac{1}{2}$ in. broad and 1 in. thick and a haffit also on the back of each, $2\frac{1}{2}$ in. broad and $\frac{3}{4}$ in. thick. Crosspieces are dovetailed into the bottom of the haffits, back and front, of the same breadth as front haffits, less the thickness of gables; corresponding crosspieces are mortised into the haffits at top, which convert the gables into shallow boxes or trays. The top board of the book-case is hinged at one end underneath the crosspiece, and folds down into that gable, allowing sufficient space behind it to contain one of the shelves, and the bottom board or shelf is hinged to the crosspiece at the bottom of the other gable in the same manner and allowing the other shelf to lie behind it, the two shelves and the top and bottom are disposed of, lying close against the inside of each gable: and there is still $2\frac{1}{2}$ in. of space left to contain the back, and assuming the book-case to be 3 ft. 6 in. broad, the back will consist of four divisions, a little more than 9 in. broad each, and these are hinged together in the manner shown in fig. 5, which is a cross section, showing the article partly folded up.

FIG 1

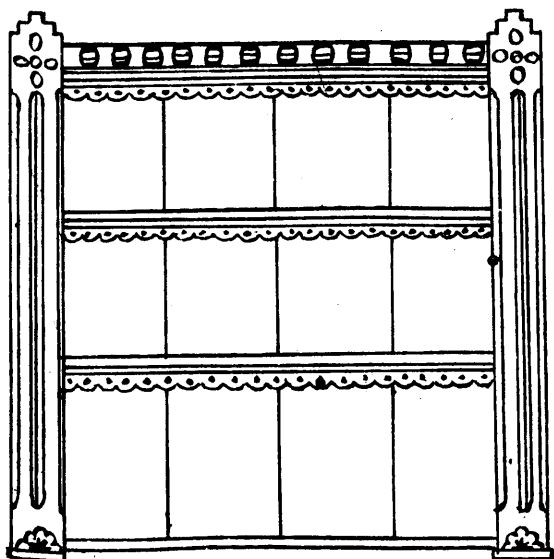


FIG 2

FIG 3

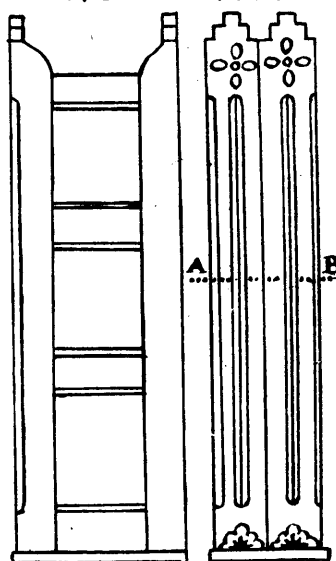


FIG 4



The four pieces composing the back are hinged to each other, and the outer ones hinged to the back haffits attached to the gables. When fig. 5 is entirely closed up, it has the appearance of fig. 4, and as the back pieces are about $2\frac{1}{2}$ in. narrower than the shelves, a space is left in front which contains the baluster railing. In fig. 1 this railing is held in its place by the two rails being let into the edge of the haffits by hollow mortices. The two shelves are held in place in the gables by short tenons, as in fig. 6, corresponding holes being made in the gables to receive them.

Now, this book-case may be packed or unpacked in a very few minutes. When folded up, as in fig. 4, it is held together by hooks and eyes, top and bottom, and the manner of getting it together for use is this: Laying the parcel with the back haffits on the floor, the hooks are undone, and the gables pulled asunder till the back is quite extended, then the bottom is turned over to its opposite gable, where they are fastened by passing a $1\frac{1}{2}$ in. screw nail through the crosspiece into each of them, but this only after the two shelves have been fitted into their holes in the gables, and the baluster rail fitted in the same manner. The two screws being in, two other screws are passed through the back near the centre joint into each shelf and this completes the job. The back is made of $\frac{3}{4}$ in. wood, the gables and shelves $\frac{1}{2}$ in. wood. The front of the haffits are chamfered and channeled down the centre. The shelves have ornamental leather—common to book-cases without doors. Fig. 6, as may be seen, is but a parcel of wood 4 ft. by 12 in. by 7 in. and may be shouldered by a boy. For a larger book-case of this description, having more shelves to stow away, an increased recess in the gables would have to be allowed.—A. CABE in *Design and Work*.

NEW DYE FROM POPLAR WOOD.

Under the name of "Ericine," a fine golden-yellow dye is now prepared from the young wood of various poplars, as well as from the woody portions of heather, the botanical name of the latter (*Erica vulg.*) having apparently suggested that of the dye. Young branches and shoots of poplar are cut off, crushed, and brayed, and then boiled in alum-water, the proportions allowed being 10 pounds of wood and 1 pound of powdered alum to each 3 gallons of water. The liquor is boiled from about twenty minutes to half an hour, and then filtered. In cooling it thickens and clears, throwing down a greenish-yellow deposit of resinous matter. When sufficiently clear, the liquor is again filtered, and then left exposed to the air for three or four days or more, according to the weather and the state of the atmosphere. It quickly oxidizes under the action of the light and air, and assumes a rich golden tint. In this state it can be used for dipping fabrics of all descriptions. For yellow and orange-yellow shades, it is used alone; mixed with Prussian blue, it gives green; with oak bark, brown and tan; with cochineal, etc., orange and scarlet shades. Or the coloring matter can be precipitated, and then makes a fine and perfectly innocuous yellow body-color for wall-hangings and such like purposes.

FIG 5

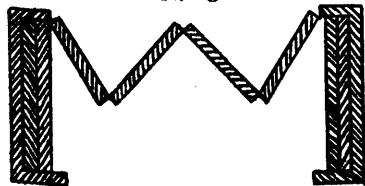


FIG 6

